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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,400	08/21/2003	Yukihiro Saida	9976-19US (OB0045US)	7774
570	7590	07/05/2007	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			KASSA, HILINA S	
ART UNIT	PAPER NUMBER			
	2625			
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07/05/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/645,400	SAIDA, YUKIHIRO
	<b>Examiner</b>	<b>Art Unit</b>
	Hilina S. Kassa	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 August 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-2, 4-6, 9-10 and 12-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Hiroaki (Japanese Publication Number 2001-018492).

**(1) regarding claim 1:**

As shown in figure 1, Hiroaki discloses an image forming system comprising:

a host having a communication function unit (100, figure 1); and

an image forming apparatus (500, figure 1) having a first communication unit (I-A, figure 1), a second communication unit (II-A, figure 2), and a relay unit (200, figure 1; the data controller unit is considered as the relay unit),

wherein said first communication unit communicates data with said communication function unit via said relay unit (paragraph 21, lines 6-10) and said second communication unit communicates the data with said communication function unit via said relay unit (paragraph 21, lines 10-13).

**(2) regarding claim 2:**

Hiroaki further discloses, the image forming system according to claim 1, wherein said first communication unit communicates normal data (paragraph 24, lines 2-7; note that first the printing driver generates graphics data as raster data) and said second communication unit communicates packet data (paragraph 24, lines 8-13; note that the packet data gets transmitted through the printer control packet to the host through the data control unit).

**(3) regarding claim 4:**

Hiroaki further discloses, the image forming system according to claim 1, wherein said image forming apparatus has a function information communication unit which communicates function information of at least one of said first and second communication units via said relay unit (300, 200, I-A, II-A, figure 1; paragraph 21, lines 6-10; note that the data control unit 200 is considered as the relay unit), and said host obtains the function information from said function information communication unit via said relay unit by said communication function unit (100, 200, I-A, figure 1; paragraph 21, lines 7-8), discriminates whether said function information corresponds to the host or not, and if it does not correspond to the host, notifies of such a fact (paragraph 26, lines 1-8; note that there is a status inquiry that denotes if the packets gets transmitted to the host).

**(4) regarding claim 5:**

Hiroaki further discloses, the image forming system according to claim 4, wherein when a function information obtaining request of at least one of said first and second communication units is received from said host (paragraph 21, lines 6-8), said function information communication unit communicates function information of a processing apparatus connected to the relevant communication unit via said relay unit (paragraph 21, lines 6-10; note that the host and printer communicate via the data control unit).

**(5) regarding claim 6:**

Hiroaki further discloses, the image forming system according to claim 1, wherein said first communication unit communicates image data (paragraph 25, lines 8-10) and said second communication unit communicates control data (paragraph 26, lines 1-5; note that control or data packet gets transmitted to the host).

**(6) regarding claim 9:**

Hiroaki further discloses an image forming apparatus (500, figure 1) comprising:  
a relay unit to which a host (200, figure 1), a first communication unit (I-A, figure 1), and a second communication unit are connected (II-A, figure 1);

said first communication unit which communicates data with said host via said relay unit (paragraph 21, lines 6-10); and

    said second communication unit which communicates the data with said host via said relay unit (paragraph 21, lines 10-13).

**(7) regarding claim 10:**

Hiroaki further discloses, the image forming apparatus according to claim 9, wherein said first communication unit communicates normal data (paragraph 24, lines 2-7; note that first the printing driver generates graphics data as raster data) and said second communication unit communicates packet data (paragraph 24, lines 8-13; note that the packet data gets transmitted through the printer control packet to the host through the data control unit).

**(8) regarding claim 12:**

Hiroaki further discloses, the image forming apparatus according to claim 9, more comprising: a function information communication unit which communicates function information of at least one of said first and second communication units via said relay unit (300, 200, I-A, II-A, figure 1; paragraph 21, lines 6-10; note that the data control unit 200 is considered as the relay unit), and said host obtains the function information from said function information communication unit via said relay unit by said

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communication function unit (100, 200, I-A, figure 1; paragraph 21, lines 7-8), discriminates whether said function information corresponds to the host or not, and if it does not correspond to the host, notifies of such a fact (paragraph 26, lines 1-8; note that there is a status inquiry that denotes if the packets gets transmitted to the host).

**(9) regarding claim 13:**

Hiroaki further discloses, the image forming apparatus according to claim 12, wherein when a function information obtaining request of at least one of said first and second communication units is received from said host (paragraph 21, lines 6-8), said function information communication unit communicates function information of a processing apparatus connected to the relevant communication unit via said relay unit (paragraph 21, lines 6-10; note that the host and printer communicate via the data control unit).

**(10) regarding claim 14:**

Hiroaki further discloses, the image forming apparatus according to claim 9, wherein said first communication unit communicates image data (paragraph 25, lines 8-10) and said second communication unit communicates control data (paragraph 26, lines 1-5; note that control or data packet gets transmitted to the host).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 7-8, 11 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroaki (Japanese Publication Number 2001-018492) as applied to claims 1 and 9 above, and further in view of Hosoda et al. (US Patent Number 6,914,687 B1).

**(1) regarding claims 3 and 11:**

Hiroaki discloses all of the subject matter as described as above except for teaching wherein said first communication unit communicates in a first PDL language and said second communication unit communicates in a second PDL language.

However, Hosoda et al. teach wherein said first communication unit communicates in a first PDL language and said second communication unit communicates in a second PDL language (column 12, lines 4-10; note that it is inherent to have PDL language for both communication means as long as the printer and host are communicating).

Hiroaki and Hosoda et al. are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a communication unit that communicates PDL language.

The suggestion/motivation for doing so would have been that PDL language is efficient enough to describe the layout and contents of a printed page.

Therefore, it would have been obvious to combine Hiroaki with Hosoda et al. to obtain the invention as specified in claims 3 and 11.

**(2) regarding claims 7 and 15:**

Hiroaki discloses all of the subject matter as described as above except for teaching wherein said relay unit and said host are connected by a set of I/F capable of receiving and transmitting.

However, Hosoda et al. teach wherein said relay unit and said host are connected by a set of I/F capable of receiving and transmitting (column 21, lines 59-62; note that the relay unit which is part of the printer and the host could be connected by universal interface).

Hiroaki and Hosoda et al. are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a universal interface I/F that connects the printer with the host.

The suggestion/motivation for doing so would have been that it establishes higher information transfer rate (column 22, lines 1-7).

Therefore, it would have been obvious to combine Hiroaki with Hosoda et al. to obtain the invention as specified in claims 7 and 15.

**(3) regarding claims 8 and 16:**

Hiroaki discloses all of the subject matter as described as above except for teaching wherein said relay unit and said host are connected by an I/F cable of USB.

However, Hosoda et al. teach wherein said relay unit and said host are connected by an I/F cable of USB (column 21, lines 59-64).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a universal interface cable of USB.

The suggestion/motivation for doing so would have been that USB interface is versatile enough for a wide range of peripheral devices and it is the standard way to communicate two devices.

Therefore, it would have been obvious to combine Hiroaki with Hosoda et al. to obtain the invention as specified in claims 8 and 16.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Edmonds et al. (US Publication Number 2003/0227641 A1) disclose a USB printer driver includes a generic driver for generating a print job in a page description language for each of a plurality of different printer types.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb could be reached at (571) 272- 7406.

**Any response to this action should be mailed to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

**Or faxed to:**

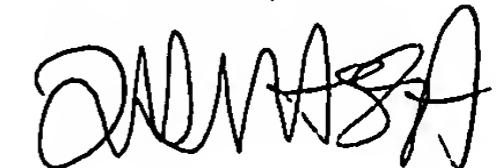
**(703) 273-8300 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Hilina Kassa

June 23, 2007



SUPERVISORY EXAMINER  
SUPERVISING PATENT EXAMINER